

Sumter County Monthly Epidemiology Report

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Prepared By: Daniel Chacreton MPH, CPH

Inside this issue:

Disease Summary	1
Flu Season	1
Food Recalls	1
Around Florida	2
Case Report	2
Disease Numbers	3
Healthy Holiday	4

Disease Summary

November brought with it Sumter County's 3rd reported case of sporadic Creutzfeldt-Jakob disease (CJD). With this case Sumter County now has the unfortunate distinction of leading the State in CJD cases. CJD is an exceedingly rare disease with only around 20 cases reported in Florida over each of the last few years.

Flu Season

The Florida Department of Health has announced that the 2014-2015 flu season is off to an early start. Presently, Florida is experiencing the highest rates of flu infection in children, below the age of 19. According to Anna Likos MD, MPH and Florida's State Epidemiologist high rates in this age group are typically a harbinger for high rates across other age groups.

This recent statement has been coupled with an announcement from the Centers for Disease Control and Prevention (CDC). According to the CDC, over half of all the flu samples analyzed this year are drift variants. This could imply that this years flu shot could potentially be less effective than we would hope.

The majority of flu strains that have been typed this year, across the nation, have been H3N2. Studies have shown that previous flu seasons, where H3N2 has predominated, have been more severe.

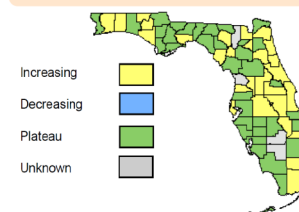
Despite the possibility of reduced vaccine efficacy (VE) both the CDC and the Florida Department of Health continue to recommend getting the flu shot. According to the CDC, during parallel drift variant years the flu vaccine had around 40 percent VE. Thus the flu shot could provide valuable protection to highly at risk groups.

Food Recalls

In the last 30 days the following food recalls were issued. More information can be found at, <http://www.floridahealth.gov/>

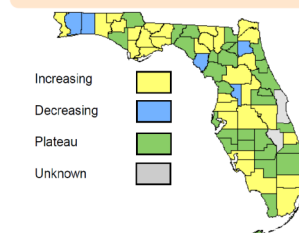
Brand Names	Food	Date of Recall	Health Risk
Global Garlic Inc.	Cuajada Fresca Olanchana 12 oz.	12/9/2014	Listeria Monocytogenes
Overhill Farms	Open Nature Chile Cheeses Enchiladas	12/3/2014	Salmonella
Ranchers Legacy Meat Co.	Ranchers Ground Beef Patties	11/22/2014	E. coli O157:H7

Week 40 County Influenza Activity Trend



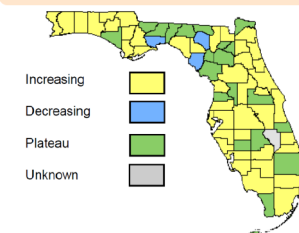
Twenty-eight counties reported increasing influenza and ILI activity.

Week 45 County Influenza Activity Trend



Thirty-one counties reported increasing influenza and ILI activity.

Week 49 County Influenza Activity Trend



Forty-two counties reported increasing influenza and ILI activity.

Courtesy of [FDOH Weekly Flu Review](#), 2014

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Daniel Chacreton, MPH, CPH

Sexually Transmitted Diseases, Tuberculosis, HIV/AIDS

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Flu Associated Pediatric Death

This year Florida has unfortunately been home to 7 cases of influenza associated pediatric mortality. Of those cases, Three are associated with the 2014-2015 flu season. During 2013 there were 8 influenza associated pediatric deaths.

Carbon Monoxide Poisoning

In the last 30 days Florida has reported 3 separate incidents of carbon monoxide (CO) poisoning, in total affecting 15 individuals.

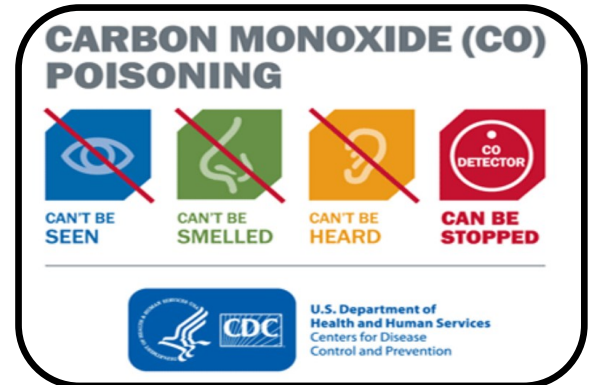
The most recent of these impacting a family of five, leading to three of the five being transported to a local emergency room and leaving two family members dead. The youngest of the deceased was four years old.

Each year Florida sees between 100 and 200 cases of carbon monoxide poisoning. Of the 178 cases, reported thus far in 2014, 8 percent have led to death. In 2014, those over the age of 50 have accounted for nearly 50 percent of all carbon monoxide poisoning cases in Florida.

As the winter temperatures continue to drop it is important to remember that gas burning heaters should not be used in small poorly ventilated areas.

Other tips to prevent CO poisoning :

- **DON'T** use propane/charcoal grills or generator indoors
- Install CO Detector in your home (check batteries annually)
- Have fuel burning appliances serviced annually by a licensed contractor



Case Report

TITLE: Classic Creutzfeldt-Jakob Disease, Sumter County

Author: Daniel Chacreton

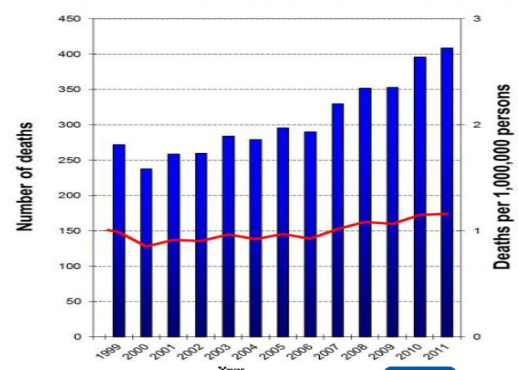
INTRODUCTION: Classic Creutzfeldt-Jakob (CJD), unlike Variant Creutzfeldt Jakob disease (vCJD), has no association with bovine spongiform encephalopathy (BSE or mad cow). However, they are similar in that they are both prion diseases that lead to neurologic decline and are always fatal. Classic, or sporadic, CJD is believed to occur spontaneously when normally arranged prion proteins shift into a pathogenic conformation. However, a few cases of iatrogenic transmission and inherited CJD have been documented in the U.S. CJD is characterized by rapidly progressing dementia, akinetic mutism, uncontrollable muscle twitches and spasms, and degeneration of motor functions. According to the CDC, in 2010, there were just under 400 deaths caused by CJD in the U.S. However, it is possible that some cases go undiagnosed due to the need for a brain tissue biopsy to confirm the presence of CJD or the misattribution of dementia cause by providers.

CASE DESCRIPTION: The patient was a 73 year old with no significant medical history. Four months prior to CJD diagnosis the patient began experiencing memory loss issues. Over the following month this progressed to difficulty walking and the patient began experiencing frequent falls. One month prior to diagnosis the patient began experiencing visual hallucinations, including seeing deceased relatives. The patient's overall condition progressively

deteriorated. At time of diagnosis the patient experienced frequent bouts of confusion, lethargy, and difficulty ambulating. An MRI of the patient's brain showed possible signs of CJD. Evaluation of cerebral spinal fluid (CSF) was positive for both tau & 14-3-3 proteins, indicative of CJD infection. The patient passed away nine months after symptom onset and five months after diagnosis. No autopsy was conducted on the patient.

Discussion: There is still a great deal to learn about CJD and other human prion diseases (including fatal familial insomnia, Kuru.. Etc). This case illustrates the importance of conducting research to better understand the causes of and working to discover methods to ultimately prevent untimely deaths from these pernicious diseases.

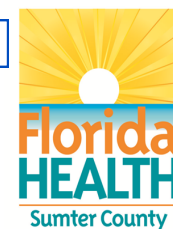
Creutzfeldt-Jakob disease deaths and age-adjusted death rate, United States, 1979-2011*



* Deaths identified from the multiple sources of death data for 1979-1999 are based on ICD-9 coding, a public-use database compiled from death certificate data. Later information was obtained from the National Death Index (NDI) and added to the 1979-1999 data set.



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention



Florida Department of Health in Sumter County

Reportable Disease Count November, 2014

Prepared By: Daniel Chacreton, M.P.H., C.P.H.

Disease Category	Sumter County					Florida				
	November		Cumulative (YTD)			November		Cumulative (YTD)		
	2014	2013	2014	2013	Expected	2014	2013	2014	2013	Expected
A. Vaccine Preventable Diseases										
Measles	-	-	-	-	0	-	-	-	7	6
Pertussis	-	-	3	-	0	34	52	695	658	674
Tetanus	-	-	-	-	0	-	1	-	4	5
Varicella	1	-	5	1	1	31	38	515	610	604
B. CNS Diseases & Bacteremias										
EEE (Eastern Equine)	-	-	-	-	0	-	-	1	2	2
H. Influenzae	-	-	2	1	1	11	17	241	238	249
Meningococcal Disease	-	-	1	-	0	6	4	49	57	58
Strep Pneumoniae, Invasive, Drug Resistant	-	-	1	1	1	6	35	315	489	479
Strep Pneumoniae, Invasive, Susceptible	1	-	2	5	5	26	33	419	500	528
C. Enteric Infections										
Campylobacteriosis	-	-	14	5	6	206	182	2788	2401	2411
Cryptosporidiosis	1	-	11	-	0	107	34	1778	384	380
Escherichia Coli Shiga Toxin +	1	1	7	3	3	38	48	495	470	484
Giardiasis	-	-	7	3	3	73	86	1075	1006	1025
Hemolytic Uremic Syndrome	-	-	-	-	0	1	-	7	10	13
Salmonellosis	1	1	22	26	25	562	639	5872	5808	5817
Shigellosis	1	-	3	1	2	202	95	2412	931	989
Vibriosis (All Reportable Species)	-	-	-	-	0	9	8	151	174	183
D. Viral Hepatitis										
Hepatitis A	-	-	1	1	1	4	14	96	125	122
Hepatitis B, Acute	-	-	1	-	1	37	43	405	341	309
Hepatitis B, Chronic	1	-	13	10	11	425	325	4613	3953	4011
Hepatitis C, Acute	-	-	-	-	0	14	13	171	207	201
Hepatitis C, Chronic	6	29	184	134	151	2070	1878	23749	18448	22730
Hepatitis +HBsAg in pregnant women	-	-	-	-	0	38	25	466	441	443
E. Vector Borne, Zoonoses										
Post-Exposure Prophylaxis for Rabies (PEP)	-	1	9	8	9	254	229	2615	2467	2507
Rabid Animals	-	-	-	-	0	3	9	80	92	95
Lyme Disease	-	1	3	3	4	15	10	151	138	160
Rocky Mountain Spotted Fever	-	-	2	-	0	2	-	41	-	30
Dengue Fever	-	-	-	-	0	9	12	92	147	152
Ehrlichiosis/Anaplasmosis	-	-	1	-	0	2	-	40	21	22
Malaria	-	-	-	-	0	2	3	46	50	50
Chikungunya*	-	-	-	-	-	53	-	395	-	-
F. Others										
Carbon Monoxide Poisoning	-	-	1	-	0	31	9	158	163	161
Creutzfeldt - Jakob Disease (CJD)	1	-	3	-	0	4	1	19	18	19
Lead Poisoning	-	-	4	1	1	85	43	742	576	688
Legionellosis	-	-	2	1	1	17	20	260	232	243
Influenza A, Novel or Pandemic Strains	-	-	-	-	0	-	-	-	-	0
Pesticide-Related Illness/ Injury	-	-	-	-	0	1	1	34	53	62

*- NEWLY ADDED

~ Expected case numbers are calculated using total incidence rates of 2013 totals.

~ Expected rates are crude rates.

~ Incidence rate calculated using State of Florida est. mid-year population 2013 (U.S. Census Bureau)

~ Mid-Year population for Sumter County Based 2012 est. (U.S. Census Bureau).

~ Case totals based on total number of cases reported during calendar years 2013 & 2014.

**Florida Department
of Health in Sumter
County**

415 E Noble Ave
Bushnell, FL 33513

Phone: 352-569-3102
Confidential Fax: 352-793-6067
After Hours Reports: 352-303-6237



[\(Click here to learn more\)](#)



≡ EPI ANALYSIS ≡



Page 4

MISSION :

To protect, promote & improve the health of all people in Florida through integrated state, county, & community efforts.

VISION :

To be the *Healthiest State* in the Nation

VALUES (ICARE) :

Innovation: We search for creative solutions and manage resources wisely.

Collaboration: We use teamwork to achieve common goals & solve problems.

Accountability: We perform with integrity & respect.

Responsiveness: We achieve our mission by serving our customers & engaging our partners.

Excellence: We promote quality outcomes through learning & continuous performance improvement.



**HOLIDAY
CHALLENGE** **NOV. 17
—THROUGH—
DEC. 31** **EAT SMART,
MOVE MORE**



Want to Maintain a Healthy Weight this holiday season?

Many Americans gain between **1 and 5 pounds** each holiday season. While it might not sound like much, most people never manage to lose those extra pounds.

With balance and moderation, you can enjoy the holidays the healthy way. Choose fresh fruit as a festive and sweet substitute for candy. Limit fats, salt, and sugary foods. Find fun ways to stay active, such as dancing to your favorite holiday music. Be active for at least 2½ hours a week. Help kids and teens be active for at least 1 hour a day.

Want more help? The Florida Department of Health is teaming up with North Carolina State University to offer the *Maintain, Don't Gain! Holiday Challenge*. Rather than focusing on trying to lose weight, this **FREE** seven-week challenge provides participants with tips, tricks, and ideas to help maintain your weight throughout the holiday season.

The Holiday Challenge includes:

- Manage holiday stress
- Fit physical activity into your busy day
- Survive a holiday party
- Daily Tips
- Mid-week Challenges
- Healthy holiday recipes
- Motivation and support from other participants

How you participate is up to you—share your strategies on our [Facebook](#) page, connect for more tips on [Twitter](#), and exchange holiday recipes on [Pinterest](#).

